



# ***Behavioral Risk Factor Surveillance System***

*2007 South Dakota Summary*  
(Published January 2009)

The following is a summary of the South Dakota Behavioral Risk Factor Surveillance System telephone survey. A more comprehensive report is available upon request. The comprehensive report is also located online at <http://doh.sd.gov/statistics/>.

## **OVERVIEW**

The South Dakota Behavioral Risk Factor Surveillance System (BRFSS) was initiated in 1987 by the South Dakota Department of Health (SDDOH) with the assistance of the Centers for Disease Control and Prevention (CDC). CDC provided financial and technical assistance, developed the questionnaire, designed the methodology, and processed the data from the core questionnaire. The SDDOH supervised the survey process, processed the data from state-specific questions, and designed and distributed the report.

The BRFSS is designed to collect information on the health behaviors of adults over time. For the 2007 survey, standard demographic questions were included along with sections on general health status, physical activity and nutrition, tobacco use, hypertension and cholesterol, health insurance, immunization, diabetes, asthma, cardiovascular disease, arthritis, and HIV/AIDS. South Dakota also added several state-specific questions to the end of the core questionnaire including women's health, skin cancer, smokeless tobacco, secondhand smoke, children with diabetes, television viewing, weight control, children's health insurance, sexual violence, children's oral health, and special health conditions in children.

Eligible respondents for the survey were individuals 18 years of age or older who resided a majority of the time at the household contacted. In households with more than one eligible respondent, a random selection was made to determine the actual respondent. Data included in the children's sections of the report were estimated based on responses from the adult respondent regarding a randomly selected child in the household. The survey was completed by 6,871 respondents. All 6,871 interviews were completed between January 1, 2007, and December 31, 2007, at an approximate rate of 573 interviews per month.

If you would like more information about the South Dakota Behavioral Risk Factor Surveillance System, or have any questions or comments, please contact Mark Gildemaster at (605) 773-3596.

## **SURVEY RESULTS**

### **Obesity**

In 2007, 27.2 percent of respondents were considered obese. Obesity generally increases until the 55-64 age group where it reaches a high and then declines from there as age increases. American Indians exhibit a significantly higher prevalence of obesity than do whites. The Central and American Indian counties regions show a very high prevalence of obesity, while those in the west region demonstrate a very low prevalence. Those who are unable to work exhibit a very high prevalence of obesity.

### **No Leisure Time Physical Activity**

In 2007, 22.6 percent of respondents reported no leisure time physical activity. The prevalence of no leisure time physical activity increases as age increases. Those who are widowed demonstrate a very high prevalence, while those who are married or who have never been married show a very low prevalence of no leisure time physical activity.

### **Cigarette Smoking**

In 2007, 19.8 percent of respondents stated they smoked cigarettes. American Indians demonstrate a significantly higher prevalence of cigarette smoking than whites. The prevalence of cigarette smoking generally decreases as education increases. Those who are unable to work or unemployed exhibit a very high prevalence, while those who are self-employed or retired show a very low prevalence of cigarette smoking.

### **Binge Drinking**

In 2007, 17.3 percent of respondents engaged in binge drinking. Males demonstrate a significantly higher prevalence of binge drinking than females. Whites exhibit a significantly higher prevalence of binge drinking than American Indians. The prevalence of binge drinking is lower in the older age groups. Drinking alcohol increases as education increases. Those who are unable to work demonstrate a very low prevalence of drinking, while those who are employed for wages, self-employed or unemployed show a very high prevalence.

### **Diabetes**

In 2007, 6.7 percent of respondents had been diagnosed with diabetes. The prevalence of diagnosed diabetes generally increases as age increases. American Indians exhibit a significantly higher prevalence of diagnosed diabetes than whites. The American Indian counties regions demonstrate a very high prevalence, while those in the southeast, northeast, and west regions show a very low prevalence of diagnosed diabetes. Those who are widowed show a very high prevalence, while those who have never been married show a very low prevalence of diagnosed diabetes.

### **Asthma**

In 2007, 7.1 percent of respondents currently had asthma. American Indian females demonstrate a significantly higher prevalence of asthma than white females. The prevalence of asthma is higher for those in lower household income groups.

**Table 1**  
**Demographic Breakdown, 2007**

|                                 | <b>Obesity</b> | <b>No Leisure Time Physical Activity</b> | <b>Cigarette Smoking</b> | <b>Binge Drinking</b> | <b>Diabetes</b> | <b>Asthma</b> |
|---------------------------------|----------------|--|--------------------------|-----------------------|-----------------|---------------|
| <b>Total</b>                    | 27.2%          | 22.6%                                    | 19.8%                    | 17.3%                 | 6.7%            | 7.1%          |
| <b><u>Gender</u></b>            |                |  |                          |                       |                 |               |
| Male                            | 28.0%          | 21.4%                                    | 20.1%                    | 23.6%                 | 6.8%            | 6.1%          |
| Female                          | 26.4%          | 23.8%                                    | 19.6%                    | 11.2%                 | 6.6%            | 8.0%          |
| <b><u>Age</u></b>               |                |  |                          |                       |                 |               |
| 18-24                           | 22.6%          | 11.5%                                    | 29.3%                    | 30.0%                 | 1.1%            | 11.5%         |
| 25-34                           | 27.4%          | 16.3%                                    | 22.0%                    | 29.6%                 | 2.0%            | 7.4%          |
| 35-44                           | 31.2%          | 18.5%                                    | 20.6%                    | 19.2%                 | 3.7%            | 4.9%          |
| 45-54                           | 28.5%          | 23.3%                                    | 22.6%                    | 17.9%                 | 6.0%            | 5.2%          |
| 55-64                           | 32.1%          | 25.7%                                    | 18.3%                    | 8.1%                  | 10.8%           | 5.8%          |
| 65-74                           | 26.4%          | 33.0%                                    | 11.0%                    | 3.1%                  | 16.2%           | 7.5%          |
| 75+                             | 19.1%          | 40.4%                                    | 5.6%                     | 0.8%                  | 14.9%           | 8.3%          |
| <b><u>Race</u></b>              |                |  |                          |                       |                 |               |
| White                           | 26.5%          | 22.6%                                    | 17.7%                    | 16.9%                 | 6.4%            | 6.7%          |
| American Indian                 | 38.2%          | 23.8%                                    | 48.8%                    | 25.0%                 | 11.0%           | 9.4%          |
| <b><u>Region</u></b>            |                |  |                          |                       |                 |               |
| Southeast                       | 27.3%          | 22.0%                                    | 17.7%                    | 16.9%                 | 6.3%            | 6.5%          |
| Northeast                       | 27.5%          | 24.5%                                    | 19.3%                    | 17.2%                 | 6.2%            | 5.5%          |
| Central                         | 30.5%          | 26.0%                                    | 18.1%                    | 16.1%                 | 8.2%            | 7.5%          |
| West                            | 23.6%          | 19.9%                                    | 20.8%                    | 16.5%                 | 6.2%            | 8.9%          |
| American Indian Counties        | 34.0%          | 22.6%                                    | 38.8%                    | 26.9%                 | 11.0%           | 9.9%          |
| <b><u>Household Income</u></b>  |                |  |                          |                       |                 |               |
| Less than \$10,000              | 42.8%          | 42.8%                                    | 43.4%                    | 11.6%                 | 13.3%           | 13.0%         |
| \$10,000-\$14,999               | 34.9%          | 38.1%                                    | 30.8%                    | 16.1%                 | 12.7%           | 17.1%         |
| \$15,000-\$19,999               | 33.1%          | 33.7%                                    | 29.3%                    | 12.9%                 | 10.3%           | 8.2%          |
| \$20,000-\$24,999               | 31.3%          | 28.3%                                    | 26.0%                    | 17.7%                 | 9.5%            | 7.9%          |
| \$25,000-\$34,999               | 26.2%          | 25.2%                                    | 22.9%                    | 15.8%                 | 7.8%            | 9.2%          |
| \$35,000-\$49,999               | 29.6%          | 23.8%                                    | 21.5%                    | 15.7%                 | 6.0%            | 5.1%          |
| \$50,000-\$74,999               | 27.5%          | 17.3%                                    | 17.0%                    | 20.5%                 | 5.1%            | 4.3%          |
| \$75,000+                       | 23.1%          | 11.4%                                    | 9.7%                     | 23.2%                 | 4.5%            | 4.3%          |
| <b><u>Education</u></b>         |                |  |                          |                       |                 |               |
| 8 <sup>th</sup> Grade or Less   | 30.6%          | 41.8%                                    | 12.0%                    | 6.3%                  | 18.7%           | 9.2%          |
| Some High School                | 24.4%          | 31.7%                                    | 36.1%                    | 11.9%                 | 8.2%            | 11.0%         |
| High School or G.E.D.           | 28.1%          | 30.1%                                    | 26.8%                    | 17.4%                 | 7.1%            | 7.9%          |
| Some Post-High School           | 29.8%          | 22.0%                                    | 21.2%                    | 19.7%                 | 7.2%            | 7.6%          |
| College Graduate                | 24.1%          | 12.0%                                    | 9.0%                     | 16.8%                 | 4.4%            | 4.8%          |
| <b><u>Employment Status</u></b> |                |  |                          |                       |                 |               |
| Employed for Wages              | 27.5%          | 18.9%                                    | 21.4%                    | 21.6%                 | 4.8%            | 5.9%          |
| Self-employed                   | 27.8%          | 24.4%                                    | 14.8%                    | 20.3%                 | 4.4%            | 4.1%          |
| Unemployed                      | 28.9%          | 25.0%                                    | 41.6%                    | 23.6%                 | 9.5%            | 8.8%          |
| Homemaker                       | 25.3%          | 23.3%                                    | 19.4%                    | 4.5%                  | 5.2%            | 7.9%          |
| Retired                         | 24.9%          | 32.2%                                    | 10.2%                    | 3.2%                  | 13.8%           | 9.0%          |
| Unable to Work                  | 40.0%          | 48.7%                                    | 34.7%                    | 8.3%                  | 24.0%           | 19.6%         |
| <b><u>Marital Status</u></b>    |                |  |                          |                       |                 |               |
| Married/Unmarried Couple        | 27.8%          | 21.3%                                    | 17.1%                    | 15.1%                 | 6.8%            | 5.7%          |
| Divorced/Separated              | 26.3%          | 29.7%                                    | 36.8%                    | 21.3%                 | 7.7%            | 7.4%          |
| Widowed                         | 25.4%          | 41.0%                                    | 13.5%                    | 3.6%                  | 14.1%           | 9.6%          |
| Never Married                   | 26.0%          | 16.7%                                    | 24.7%                    | 30.1%                 | 2.5%            | 11.4%         |

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2007

## **BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM DEFINITIONS**

**Obesity:** Obesity is defined as respondents who report having a Body Mass Index (BMI) of 30.0 or above. BMI is calculated by taking a person's body weight in pounds divided by his or her height in inches divided by height in inches (again) times 703 (i.e.,  $((wt/ht)/ht \times 703)$ ).

**No Leisure Time Physical Activity:** Respondents who report no leisure time physical activity or exercise during the past 30 days other than the respondent's regular job.

**Cigarette Smoking:** Respondents who report having smoked at least 100 cigarettes in their lifetime and now smoke every day or smoke some days.

**Binge Drinking:** Respondents who report having five or more alcoholic drinks (Males) or four or more alcoholic drinks (Females) on one occasion, one or more times in the past month.

**Diabetes:** Respondents ever told by a doctor that they have diabetes. Excluding women who were told this while they were pregnant.

**Asthma:** Respondents who have been told by a doctor, nurse, or health professional that they had asthma and that they still have asthma.